

for the loan of much additional material, and to a great many botanical friends who have sent me specimens of interest. Mr. C. D. Beadle gave me the privileges of the Biltmore Herbarium and very kindly aided me in the examination of the southern species. Mr. W. W. Ashe most kindly made a three days' trip to allow me to see his *Crataegus* herbarium. I have also to thank Dr. Marshall A. Howe for numerous translations of the descriptions of the older species.

NEW YORK BOTANICAL GARDEN.

## NOTES ON SOME PLANTS OF NORTHEASTERN AMERICA.

(Continued from page 55.)

M. L. FERNALD.

**DENTARIA LACINIATA** Muhl., var. **integra** (Schulz), n. comb. *Cardamine laciniata* (Muhl.) Wood, var. *integra* Schulz in Engler's Bot. Jahrb. xxxii. 349 (1903).—A rather local extreme, having the leaves strictly ternate; the lateral leaflets entire or slightly toothed, but not cleft. Known only from western New York to Illinois.

**GAYLUSSACIA BACCATA** (Wang.) C. Koch, forma **LEUCOCARPA** (Porter) Fernald, RHODORA, x. 53 (1908). My attention has been called by several friends to a clerical error by which, in the original publication of this combination, I credited Wangenheim instead of C. Koch with the publication of *G. baccata*. *G. baccata* (Wang.) C. Koch, Dendrol. ii. pt. 1, 93 (1872) was based upon *Andromeda baccata* Wang., Beitr. Holzger. iii. t. 30, fig. 69 (1787).

**TEUCRIUM CANADENSE** L., var. **littorale** (Bicknell), n. comb. *T. littorale* Bicknell, Bull. Torr. Bot. Cl. xxviii. 169 (1901).—A lower stiffer and usually more simple plant than the inland *T. canadense*, but clearly passing to it in rich soil. In their most extreme developments the two plants are easily distinguished; the var. *littorale* of coastal beaches having the upper surface of the leaves papillose-roughened beneath the fine appressed pubescence, while the plant of less exposed situations is, as we should expect, thinner-leaved and with less developed papillae.

**TEUCRIUM OCCIDENTALE** Gray, var. **boreale** (Bicknell), n. comb. *T. boreale* Bicknell, Bull. Torr. Bot. Cl. xxviii. 171 (1901).—The first specimens cited by Dr. Gray under his *T. occidentale*, the Nebraska plants of *Hayden*, “etc.” [*H. Engelmann*], have abundant short capitate or stipitate glands amongst the longer somewhat viscid hairs, and represent a species which extends across the continent from Maine to British Columbia and California. An extreme phase of the plant with few or no capitate glands amongst the long hairs of the calyx has a similar range and does not seem specifically separable from *T. occidentale*. This is the plant described by Mr. Bicknell as *T. boreale*. It has been mistaken by Piper, in his *Flora of Washington*<sup>1</sup> for the true *T. occidentale*, while the typical viscid *T. occidentale* is described by him as a new subspecies *viscidum* Piper, *Contrib. U. S. Nat. Herb.* xi. 487 (1906).

**STACHYS TENUIFOLIA** Willd., var. **aspera** (Michx.), n. comb. *S. aspera* Michx. Fl. ii. 5 (1803).—The familiar specific name, *S. aspera*, unfortunately, is antedated by *S. tenuifolia* Willd. Sp. iii. 100 (1801), which must be taken up for the species. *S. tenuifolia* is the smoother phase of the plant, which has been passing as *S. aspera*, var. *glabra* Gray, *Syn. Fl.* ii. pt. 1, 387 (1878).

**STACHYS PALUSTRIS** L., var. **homotricha**, n. var., caule retrorso-hirsuto, pilis longis subuniformibus.—Sides and angles of the stems almost uniformly hirsute with long retrorse hairs; otherwise like the typical form.—A frequent plant from eastern New Brunswick to Connecticut and central New York, thence westward to the Pacific. Type collected by the writer on a sandy esker at Brownville, MAINE, September 20, 1900. In typical *S. palustris* the angles of the stem are hirsute with spreading or reflexed hairs, but the sides of the stem are finely appressed-pubescent.

**SATUREJA glabra** (Nutt.), n. comb. *Hedeoma glabra* Nutt. Gen. i. 16 (1818). *H. arkansana* Nutt. Trans. Am. Phil. Soc., n. s., v. 186 (1834). *Calamintha Nuttallii* Benth. in DC. Prodr. xii. 230 (1848). *Calamintha glabella*, var. *Nuttallii* Gray, Man. ed. 2, 307 (1856). *Clinopodium glabrum* Ktze., Rev. Gen. 515 (1891). *Satureja arkansana* Briq. in Engl. & Prantl, Pflanzenf. iv. Ab. 3, 302 (1896).—The writer follows Briquet in considering *Calamintha* Lam. inseparable generically from the older *Satureja* L.

<sup>1</sup> *Contrib. U. S. Nat. Herb.* xi. (1906).

**PYCNANTHEMUM pycnanthemoides** (Leavenw.), n. comb. *Tullia pycnanthemoides* Leavenw., Am. Jour. Sci. xx. 343, pl. 5 (1831). *Pycnanthemum Tullia* Benth. Lab. Gen. et Sp. 328 (1834). *Koellia pycnanthemodes* Ktze. Rev. Gen. ii. 520 (1891).—By vote of the Vienna Congress the long established name *Pycnanthemum* Michx. (1803) is retained for this genus instead of the earlier but long overlooked *Koellia* Moench. (1794).

**MENTHA ARVENSIS** L., var. **glabrata** (Benth.), n. comb. *M. canadensis*, var. *glabrata* Benth. Lab. Gen. et Sp. 181 (1833). *M. arvensis*, var. *Penardi* Briq. Bull. Herb. Boiss. iii. 215 (1895).—As already indicated by Briquet, *Mentha arvensis* L. and *M. canadensis* L. are confluent, and the latter American extreme is treated as a narrow-leaved variety of the more broadly distributed *M. arvensis*. The var. *glabrata*, common across Canada, and locally southward into New England and Pennsylvania, and along the Rocky Mts., is generally well marked by its less branched smoother stem and smoother leaves, but it clearly intergrades with the other varieties of the species.

**GERARDIA PEDICULARIA** L., var. **ambigens**, n. var., caule supra glanduloso-villoso; pedicellis calycibusque plerumque villosis.—Stem glandular-villous above; pedicels and calyx usually villous.—Wisconsin to North Carolina and Missouri. Type collected at St. Croix Falls, WISCONSIN, August 20, 1900 (*C. F. Baker*). Transitional between the typical *G. pedicularia*, with the stems puberulent above, and the more southern var. *pectinata* Nutt. Gen. ii. 48 (1818), which has the stems very villous and the calyx glandular-hispid.

**VIBURNUM LENTAGO** L., var. **sphaerocarpum** Gray, n. var. in herb., drupis sphaeroideis 7–9 mm. diametro.—Drupes spherical, 7–9 mm. in diameter.—The original specimens thus labeled by Dr. Gray were collected in NORTH DAKOTA, at Fort Abraham Lincoln, by *Dr. V. Havard*; but other material has accumulated which shows this small- and globose-fruited extreme to occur from New England to Wyoming.

**EUPATORIUM PURPUREUM** L., var. **foliosum**, n. var., inflorescentia late corymbosa foliis bracteisque brevioribus.—Inflorescence broadly corymbose as in var. *maculatum*, but overtopped by the very long upper leaves and bracts.—The characteristic form of the species from western Newfoundland and the Gaspé Peninsula to northern Maine, extending westward to northern Michigan and Iowa. Type collected by the writer in a river-thicket at Van Buren, MAINE, September 18, 1900.

EUPATORIUM URTICAEFOLIUM Reichard, var. **villicaule**, n. var., caule petiolisque sordido-villosis.—Stem and petioles sordid-villous; otherwise as in the typical form.—VIRGINIA, Bedford Co., 1871 (*A. H. Curtiss*).

SOLIDAGO PETIOLARIS Ait., var. **Wardii** (Britton), n. comb. *S. Wardii* Britton, *Man.* 935 (1901).—Differing from *S. petiolaris* only in the firmer more glutinous and therefore more lustrous foliage.

SOLIDAGO HISPIDA Muhl., var. **lanata** (Hook.), n. comb. *S. lanata* Hook. *Fl. Bor.-Am.* ii. 4 (1834). *S. bicolor*, var. *lanata* Gray, *Proc. Am. Acad.* xvii. 190 (1882).—Plants from the banks of the Little Cascapedia and Grand Cascapedia Rivers, and other portions of the Gaspé Peninsula, Quebec, are identical with the original material collected by Drummond on the Plains of the Saskatchewan.

SOLIDAGO **callicola** (Fernald), n. comb. *S. Virgaurea*, var. *callicola* Fernald, *RHODORA*, i. 190 (1899).—Recent detailed studies of types and authentic specimens of this group have convinced the writer that we have in eastern America no plant which can satisfactorily be placed with the Eurasian *S. Virgaurea*. The nearest American ally of that species, as understood by the writer, is *S. macrophylla* Pursh, which, however, is distinct in its longer involucre, etc. *S. callicola* also simulates forms of *S. Virgaurea* but is quickly distinguished by its firmer more herbaceous bracts and much shorter achenes (only 1–2 mm. long). Its range is now extended from the northeastern border of Maine to the limestone mountains of Gaspé Co., Quebec.

SOLIDAGO **Cutleri**, n. nom. *S. Virgaurea*, var. *alpina* Bigelow, *Fl. Bost.* ed. 2, 307 (1824). *S. alpestris* Porter, *Bull. Torr. Bot. Cl.* xx. 210 (1893) and other Am. authors, not Waldst. & Kit. in Willd. *Sp.* iii. 2065 (1804).—The late Dr. Porter considered this plant identical with the Old World *S. alpestris*; but that species as shown by many European specimens, as well as Waldstein & Kitaibel's own beautiful plate (*Ic. t.* 208), is very unlike the alpine plant of Bigelow. In fact, it is superficially very similar to the dwarfed alpine variety *thyrsoides*<sup>1</sup> of *S. macrophylla*, having thinnish leaves with the closely sharp-serrate elliptic or ovate blades rather abruptly narrowed to the slender petiole; and its involucre bracts are thin and linear-attenuate. *S. Cutleri*,<sup>2</sup> on the other hand, has the thick obovate

<sup>1</sup> *RHODORA*, viii. 228 (1906).

<sup>2</sup> Since the name *Solidago alpina* has been twice used and there is already a *S. Bigelovii*, it is appropriate that our alpine Goldenrod should bear the name of the distinguished New England botanist and pioneer explorer of the White Mountains, MANASSEH CUTLER.

to oblanceolate leaves crenate or serrate chiefly above the middle and tapering gradually to a broad-winged base; and its subherbaceous obtuse or merely acutish bracts are oblong or lanceolate. From other American plants of the *Virgaurea* group, *S. Cutleri* is quickly distinguished by its 30–50-flowered broad heads, its few (2–4, rarely 5) large cauline leaves, and its long (3–3.5 mm.) hirsute achenes. It is confined apparently to the most alpine districts of New England and New York, being known to the writer only from the following mountains. MAINE, Mt. Katahdin; Mt. Bigelow, altitude 1150 m.: NEW HAMPSHIRE, alpine regions of Mts. Adams, Washington, and Monroe; summit of Mt. Lafayette: VERMONT, Chin of Mt. Mansfield: NEW YORK, summit of Mt. Whiteface.—Reported from other high summits, but from none of the lesser mountains.

SOLIDAGO RANDII (Porter) Britton, var. **monticola** (Porter), n. comb. *S. puberula*, var. *monticola* Porter, Bull. Torr. Bot. Cl. xix. 129 (1892). *S. Virgaurea*, var. *monticola* Porter, Bull. Torr. Bot. Cl. xx. 209 (1893). *S. Virgaurea*, var. *Deanei* Porter, Mem. Torr. Bot. Cl. v. 320 (1894).—*S. Randii* includes a large portion of the material which has passed with us as *S. Virgaurea*. In very exposed situations it passes to the dwarf extreme which has been separated as var. *monticola*, and which is often mistaken needlessly for *S. Cutleri*. In *S. Randii* and its variety the heads are 15–30-flowered, in well developed plants the cauline leaves are much more numerous than in *S. Cutleri*, and the appressed-setulose or glabrate achenes are only 2–2.6 mm. long. As far as observed by the writer *S. Cutleri* and *S. Randii*, var. *monticola* are of quite different altitudinal distribution. As pointed out in the preceding paragraph *S. Cutleri* is a truly alpine species. *S. Randii*, var. *monticola*, on the other hand, is apparently unknown on our highest summits, but occurs on the lesser peaks and slopes of northern New England. Its most elevated stations are on the summits of such mountains as Mt. Willard, New Hampshire (793 m.), Mt. Monadnock, New Hampshire (967 m.), and Mt. Willoughby, Vermont (808 m.); and it descends on the granitic coast of eastern Maine to rocks bordering the sea.

SOLIDAGO HUMILIS Pursh, Fl. 543 (1814). The plant which has long passed as *S. humilis* Pursh or *S. Purshii* Porter has a most unfortunate nomenclatorial history. The plant itself is one of the best marked of our eastern species, characterized by its racemose or thyrsoïd inflorescence, with the often glutinous heads frequently on

comparatively elongate pedicels (5–15 or even 25 mm. long). Its stem is exceedingly leafy, the subuniform or very gradually smaller oblanceolate or linear cauline leaves numbering, in well developed plants, 10 to 30 or more and commonly bearing small fascicles of leaves in their axils. Its obscurely ribbed oblanceolate basal leaves are 3–12 cm. long, 5–7 mm. broad. This distinct plant occurs on more or less calcareous cliffs and ledgy shores, from the Aroostook River, New Brunswick, to the Potomac, and locally westward to the sand-hills of Lake Michigan. Dr. Gray, on returning from a study of types of American Goldenrods in European herbaria, identified<sup>1</sup> this plant with Pursh's *S. humilis*; but an examination of Pursh's type, now preserved at the British Museum of Natural History, shows that this conclusion must have been reached through some confusion of data.

As Dr. Gray clearly states the Pursh type was "the Newfoundland plant, in herb. Banks, where Solander indicated the species."<sup>1</sup> A photograph of this original sheet in the Banks herbarium and notes taken by the writer show that there are three individual plants upon it. In the middle of the sheet is a specimen with seven very long leaves, all but the uppermost long-petioled, the middle one more than one third as long as the full height of the plant. The inflorescence is an interrupted more or less wand-like panicle. This specimen, which bears the data (on the reverse side of the sheet) "Newfoundland J. B.," was correctly indicated by a note on the sheet in Dr. Gray's hand as the original of *S. humilis* Pursh. The other two plants on the sheet are clearly of one collection and bear the data, "Amer. Sept. Hudson Bay, Albany Fort, 1781," and are marked by Dr. Gray: "Perhaps is the *S. stricta* Torr. & Gray, Fl. non Ait. A. Gray, 1881." These plants from Hudson Bay are, as identified by Dr. Gray, clearly *S. uliginosa* Nutt. (*S. stricta* Torr. & Gray, not Ait.); but the Newfoundland plant collected by Banks is less obviously that species and may be an uncharacteristic *S. uniligulata* (DC.) Porter. As shown by the manuscript descriptions of the Banks plants preserved at the British Museum, Solander had written a description (p. 321) to cover a Bartram plant from Florida and the Banks plant from Newfoundland. Subsequently, however, Dryander altered the description to include the Hudson Bay specimen but to exclude the Florida plant; and Pursh in his Flora (p. 543) took his description

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description of *S. canadensis*, which was originally said to have the heads smaller than in the subentire-leaved *S. altissima* and which was characterized "foliis trinerviis subserratis."

A detailed study of the small-headed northern plant, which was considered by Dr. Porter a variety of *S. canadensis* but which is the *S. canadensis* of the old European gardens and herbaria and very evidently of Linnaeus, and the larger-headed more southern plant, which was described by Linnaeus as *S. altissima* and has subsequently passed as a large variation of *S. canadensis* (var. *scabra* Torr. & Gray and much which has passed as var. *procera* Torr. & Gray) has convinced the writer that they are perfectly good species and that they are separated by several other characters besides those originally emphasized by Linnaeus. *S. canadensis* has the stem glabrous at least below, though often minutely pubescent above; in *S. altissima* the stem is cinereous-puberulent. In *S. canadensis* the leaves are thin, narrowly lanceolate, glabrous above, minutely pubescent on the nerves beneath, and mostly sharp-serrate; in *S. altissima* the thickish leaves are lanceolate, minutely pubescent or scabrous above, short-pilose beneath, and subentire or only slightly toothed. The involucre of *S. canadensis* is 2–2.8 mm. long, of thin greenish-straw-colored mostly attenuate bracts; that of *S. altissima* 3.2–4.5 mm. long, with more herbaceous and coarser bracts. *S. canadensis*, which abounds from Newfoundland and the lower St. Lawrence to North Dakota, extending southward throughout northern and eastern New England and along the mountains to West Virginia and Kentucky, is in the height of bloom from July to September; *S. altissima* occurs from eastern Massachusetts and Vermont to Michigan and Kansas, extending south to the Gulf of Mexico, and flowers from August to October.

SOLIDAGO ALTISSIMA L., var. **procera** (Ait.), n. comb. *S. procera* Ait. Hort. Kew. iii. 211 (1789). *S. canadensis*, var. *procera* Torr. & Gray, Fl. ii. 224 (1841).

SOLIDAGO GRAMINIFOLIA (L.) Salisb., var. **Nuttallii** (Greene), n. comb. *Euthamia Nuttallii* Greene, Pittonia, v. 73 (1902).—*S. graminifolia* is the common glabrous or nearly glabrous plant of eastern Canada and the northern states, but it passes very frequently to the var. *Nuttallii*, which has the leaves more pubescent and the branches of the inflorescence hirtellous. As originally defined by Professor Greene the more pubescent plant was assigned a known range from

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of *S. humilis* from the complex description of Solander and Dryander, citing "*Herb. Banks. mss.*" From the fact that Solander, in the original manuscript description of *S. humilis*, cited (besides the subsequently discarded Florida plant) only one plant, the Banks specimen from Newfoundland, it is fairly clear that this should stand as the type of Pursh's species. Whether or not it proves on more critical examination to be *S. uniligulata* (which is probable) or *S. uliginosa*, it certainly is not the plant of our river-gorges and cliffs to which the name *S. humilis* has so long been applied.

On account of a supposed earlier *Solidago humilis* accredited to Miller, which, however, was published by Miller as *S. humilius*<sup>1</sup> and which is *S. canadensis* L., Porter rejected the name *S. humilis* Pursh and assigned to the plant which has been passing as Pursh's *S. humilis* the name *S. Purshii*,<sup>2</sup> defining his species merely by the citation of the synonym *S. humilis* Pursh. The name *S. Purshii* Porter is, therefore, strictly synonymous with *S. humilis* Pursh; and since, as above pointed out, the plant which must stand as the type of Pursh's species is *S. uniligulata* or a related species, the names *S. humilis* and *S. Purshii* are equally untenable for the plant of our northeastern river-banks and cliffs. A well known station for the plant specially under discussion is at the Great Falls of the Potomac. The plants from this station long have been and by most botanists still are considered conspecific with those from the ledges of the Aroostook, Kennebec, Winooski (or Onion) and Susquehanna Rivers; but by Professor E. L. Greene they have been separated on supposed characters of the inflorescence, involucre, and achenes as *S. racemosa*.<sup>3</sup> The characters upon which Professor Greene relies for the separation all fail when tested by comparison with more northern specimens; and the range assigned by him on a succeeding page ("that plant of the East Canadian coast and islands which is typical *S. humilis*, Pursh, now received under the more safe name of *S. Purshii*, Porter"<sup>4</sup>) suggests that his segregation of *S. racemosa* from the plant of our river-gorges and cliffs, which is known from only a single "East Canadian" station<sup>5</sup> and from no coastal or island stations, was accomplished without a precise understanding of the northern "*S.*

<sup>1</sup> Mill Dict. ed. viii. no. 16 (1768).

<sup>2</sup> Porter, Bull. Torr. Bot. Cl. xxi. 311 (1894).

<sup>3</sup> Greene, Pittonia, iii, 160 (1897).

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<sup>5</sup> The Gorge of the Aroostook River, less than two miles from the northern Maine border.

*humilis*." Nevertheless, although proposed by Professor Greene for a plant which he supposed distinct, *S. racemosa* is the first name clearly applied to the plant with racemose inflorescence which has passed as *S. humilis* or *S. Purshii*.

SOLIDAGO RACEMOSA Greene, var. **Gillmani** (Gray), n. comb. *S. humilis*, var. *Gillmani* Gray, Proc. Am. Acad. xvii. 191 (1882). *S. Virgaurea*, var. *Gillmani* Porter, Bull. Torr. Bot. Cl. xx. 209 (1893). This splendid plant of the Great Lake region has not only the leaf-texture and -outline but the axillary fascicles, the elongate pedicels, and the involucre and achenes of *S. racemosa*, and seems to differ only in its great size and in the tendency of the lower leaves to have longer and sharper teeth.

SOLIDAGO RUGOSA Mill., var. **villosa** (Pursh), n. comb. *S. villosa* Pursh, Fl. ii. 537 (1814). The material in the Banks herbarium upon which Pursh based his species represents a beautifully marked extreme of *S. rugosa* in which the panicle is elongate and most of the racemes nearly equaled or exceeded by the large subtending leaves. It is the common tendency of the species in western Newfoundland, southern Labrador, and the lower St. Lawrence region, extending into northern Maine.

SOLIDAGO ALTISSIMA L. Sp. 878 (1753). As stated by Dr. Gray, "the true original of the Linnaean species is the 'Virga aurea altissima serotina, panicula speciosa patula, Mart. Cent. 14, t. 14.'" <sup>1</sup> This plate <sup>2</sup> is remarkably characteristic and represents a plant which was taken by Dr. Gray as "a large form of *S. Canadensis*." In fact, Linnaeus compares it with *S. canadensis* in the following words: "Habitus praecedenti [*S. canadensis*] simillimus, diversus magnitudine, tempore florendi, serraturis nervisque foliorum," etc., <sup>3</sup> thus showing a clearer conception of the two plants, *S. canadensis* and *S. altissima*, than have most subsequent authors. *S. canadensis*, as interpreted by Dr. Gray, apparently with good reason, is the small-headed plant which has subsequently been described as *S. canadensis*, var. *glabrata* Porter, Bull. Torr. Bot. Cl. xxi. 310 (1894). Dr. Porter, in describing the northern plant as var. *glabrata*, separated it from the commoner plant southward on account of its smoother stem, linear-lanceolate sharp-serrate smoothish leaves, and especially its smaller panicles and involucre; characters which in the main agree with the Linnaean

<sup>1</sup> Gray, Proc. Am. Acad. xvii. 177 (1882).

<sup>3</sup> L. Sp. 878 (1753).

<sup>2</sup> Martyn, Hist. Pl. 14, t. 14, (1728).

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SOLIDAGO GRAMINIFOLIA (L.) Salisb., var. **Nuttallii** (Greene), n. comb. *Euthamia Nuttallii* Greene, Pittonia, v. 73 (1902).—*S. graminifolia* is the common glabrous or nearly glabrous plant of eastern Canada and the northern states, but it passes very frequently to the var. *Nuttallii*, which has the leaves more pubescent and the branches of the inflorescence hirtellous. As originally defined by Professor Greene the more pubescent plant was assigned a known range from

New Jersey and Pennsylvania to Virginia. Material in the Gray Herbarium shows it to extend northeastward to Nova Scotia and west to Michigan.

**SOLIDAGO polycephala**, n. nom. *Euthamia floribunda* Greene. *Pittonia*, v. 74 (1902), not *S. floribunda* Phil. Anal. Univ. Chil. lxxxvii. 430 (1894).—This pretty species is quickly distinguished from *S. graminifolia*, var. *Nuttallii* by its tiny involucre (3–3.5 mm. long), with very conspicuous appressed deltoid green tips to the bracts. It was originally described from southern New Jersey but the writer has examined characteristic material from adjacent Pennsylvania.

**SOLIDAGO minor** (Michx.), n. comb. *S. lanceolata*, var. *minor* Michx. Fl. ii. 116 (1803). *S. tenuifolia* Pursh, Fl. ii. 540 (1814) in part. *Euthamia minor* Greene, *Pittonia*, v. 78 (1902).—Distinguished from *S. tenuifolia* Pursh, which has the flat leaves 2–6 mm. wide and the campanulate involucre 2–3 mm. broad, by its almost acicular leaves (the middle cauline 1–1.5 mm. wide) and its nearly cylindric acute-based involucre only 1–1.5 mm. broad. Best developed from Virginia to Florida and Alabama, but said by Professor Greene to reach Connecticut.

**SOLIDAGO (EUTHAMIA) Moseleyi**, n. sp., caule glabro 5–6 dm. alto fastigiatis ramoso, ramulis scabris; foliis linearibus vel linearilanceolatis apice attenuatis 2–3 mm. latis 1-nerviis minute punctatis, foliis ramorum minoribus, ramulorum minutis subulatis; capitulis plerumque pedicellatis, pedicellis scabris; involucre subcylindrico 3–4 mm. longo 1.5–2 mm. lato, bracteis linearibus tenuibus valde inequalibus.—Stem glabrous, 5–6 dm. high, fastigiate-branched above the middle; branchlets scabrous: leaves linear or linear-lanceolate, taper-pointed, 2–3 mm. broad, 1-ribbed, minutely punctate; rameal leaves smaller, those of the branchlets reduced to minute subulate bracts: heads mostly on scabrous pedicels: involucre subcylindric (slender-turbinate in drying), 3–4 mm. long, 1.5–2 mm. broad; its very unequal thin bracts linear.—OHIO, Oxford Prairie, Erie Co., September 5, 1898 (*E. L. Moseley*). Resembling *S. tenuifolia* Pursh, but without the axillary fascicles of small leaves which usually characterize that species; the bracts of the branchlets much shorter; the heads less glomerulate; and the involucre much smaller and more slender, with softer bracts, that of *S. tenuifolia* being campanulate, 2–3 mm. thick, with firm oblong bracts.

**SOLIDAGO gymnospermoides** (Greene), n. comb. *Euthamia gym-*